Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1.   (Original) A method of producing a shape, comprising:

using a virtual reality environment in which positions of a user's hand are tracked; and

forming a three-dimensional modeled surface by adding shapes defined by hand movements at each of a plurality of intervals.

2.   (Previously presented) A method of producing a shape, comprising:

using a virtual reality environment in which positions of a user's hand are tracked;

forming a three-dimensional modeled surface by adding shapes defined by hand movements at each of a plurality of intervals; and

wherein an inside surface of the hand is used to form the modeled surface, by tracking movement of a tangent to the hand, to define a tangent plane of a surface being created.

3.   (Original) A method as in claim 2 wherein said using comprises tracking hand movement is tracked via a tracker and glove.

2

4.   (Previously presented) A method as in claim 1 further comprising using an incremental technique to take an existing mesh of samples and changing it to add a new sample.

5.   (Previously presented) A method of producing a shape, comprising:

using a virtual reality environment in which positions of a user's hand are tracked;

forming a three-dimensional modeled surface by adding shapes defined by hand movements at each of a plurality of intervals;

using an incremental technique to take an existing mesh of samples and changing it to add a new sample; and

wherein said technique comprises finding a neighborhood of samples, identifying a surface region, removing identified parts, and creating new parts to replace the identified parts, where the new parts take a new sample into account.

6.   (Previously presented) A method as in claim 5 wherein said technique utilizes a projective plane to determine how the new parts should be formed.

3

7.   (Previously presented) A method of producing a shape, comprising:

using a virtual reality environment in which positions of a user's hand are tracked;

forming a three-dimensional modeled surface by adding shapes defined by hand movements at each of a plurality of intervals;

wherein the surface is selected as a normal to the surface of the hand.

8.   (Original) A method as in claim 1 further comprising defining a first hand position which defines a starting position and a second hand position which defines a stopping of drawing.

9.   (Original) A method as in claim 1 further comprising defining a hand position which forms an eraser tool.

10.   (Original) A method as in claim 1 further comprising modifying the drawing using one of a plurality of props.

11.   (Original) A method as in claim 10 wherein said props are tongs which can be squeezed and moved to rotate the shape.

4

12.   (Original)   A method as in claim 10 wherein said prop
is a spherical ball.

13.   (Original)   A method as in claim 10 wherein said prop
is a sponge which alters a look of the shape.

14.   (Original)   A method as in claim 13 wherein said
altering is by smoothing.

15.   (Currently amended)   A method of producing a shape,
comprising:

tracking a position of a user's hand; and

forming a three-dimensional modeled surface based on said
position of said user's hand at different times by finding hand
positions at different times, storing those positions, and
forming the surface using said positions to define points on the
actual surface that is formed.

16.   (Previously presented)   A method as in claim 15,
wherein said forming comprises using the hand to create 3d-
strokes of shape.

5

17.   (Previously presented)   A method as in claim 15,
wherein said using comprises using the bend of the hand to
define the curvature of 3d-strokes.

18.   (Currently amended)   A method of producing a shape,
comprising:

tracking a position of a user's hand;

forming a three-dimensional modeled surface based on said
position of said user's hand at different times;

wherein said forming comprises using the hand to create 3d-
strokes of shape;

further comprising displaying a trace of the path of the
hand,

sensing at least 7 of the hand's degrees of freedom for the
purposes of shape creation, said degrees of freedom including
the hand's position and orientation in space, along with degrees
of freedom that are affected by the hand's posture.

19.   (Previously presented)   A method of producing a shape,
comprising:

tracking a position of a user's hand;

forming a three-dimensional modeled surface based on said
position of said user's hand at different times;

6

wherein said forming comprises using the hand to create 3d-strokes of shape; and

further comprising merging samples from one hand position to an existing shape.

20.   (Previously presented)   A method of producing a shape, comprising:

tracking a position of a user's hand;

forming a three-dimensional modeled surface based on said position of said user's hand at different times;

wherein said forming comprises using the hand to create 3d-strokes of shape; and

wherein said samples are added by deprojecting a shape, removing parts, adding new parts, and reprojecting said shape.

21.   (Previously presented)   A method as in claim 15 further comprising using hand postures to switch between different modes of operation.

22.   (Previously presented)   A method as in claim 15 wherein a first hand posture comprises a start to track posture.

7

23.   (Previously presented) A method as in claim 15 wherein a second hand posture comprises a stop track posture.

24.   (Previously presented) A method as in claim 15, further comprising displaying different tools at the hand's position based on different postures.

25.   (Previously presented) A method as in claim 15 further comprising using the finger to draw a narrower stroke.

26.   (Original) A three dimensional drawing device, comprising:

a hand tracking element, which tracks three dimensional positions and hand shapes of an operator's hand in a virtual reality environment in which positions of a user's hand are tracked; and

forming a three-dimensional modeled surface by adding shapes defined by hand movements at each of a plurality of intervals.

27.   (Original) A shape drawing system, comprising:

a user interface which operates to command shapes to be created; and

8

a processing element which incrementally adds surface regions to an extant surface.

28.   (Original)   A system as in claim 27, wherein said user interface tracks hand movements.

29.   (Original)   A method of drawing on a computer, comprising:

displaying a first shape on the computer;

using the hand to define a new shape, to be added to said first shape;

using said new shape to apply deformations to said first shape; and

displaying said first shape as deformed by said new shape.

30.   (Previously presented)   A method as in claim 29, wherein a portion of the first shape moves toward the hand.

31.   (Original)   A system of 3d shape-creation, comprising:

monitoring hand posture;

obtaining continuous variables that continuously vary between a maximum value and a minimum value based on said hand posture; and

9

using said variables to define a shape.

10